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|                                                                                   |                     |
|                                                                                   | Date: June 26, 2020 |

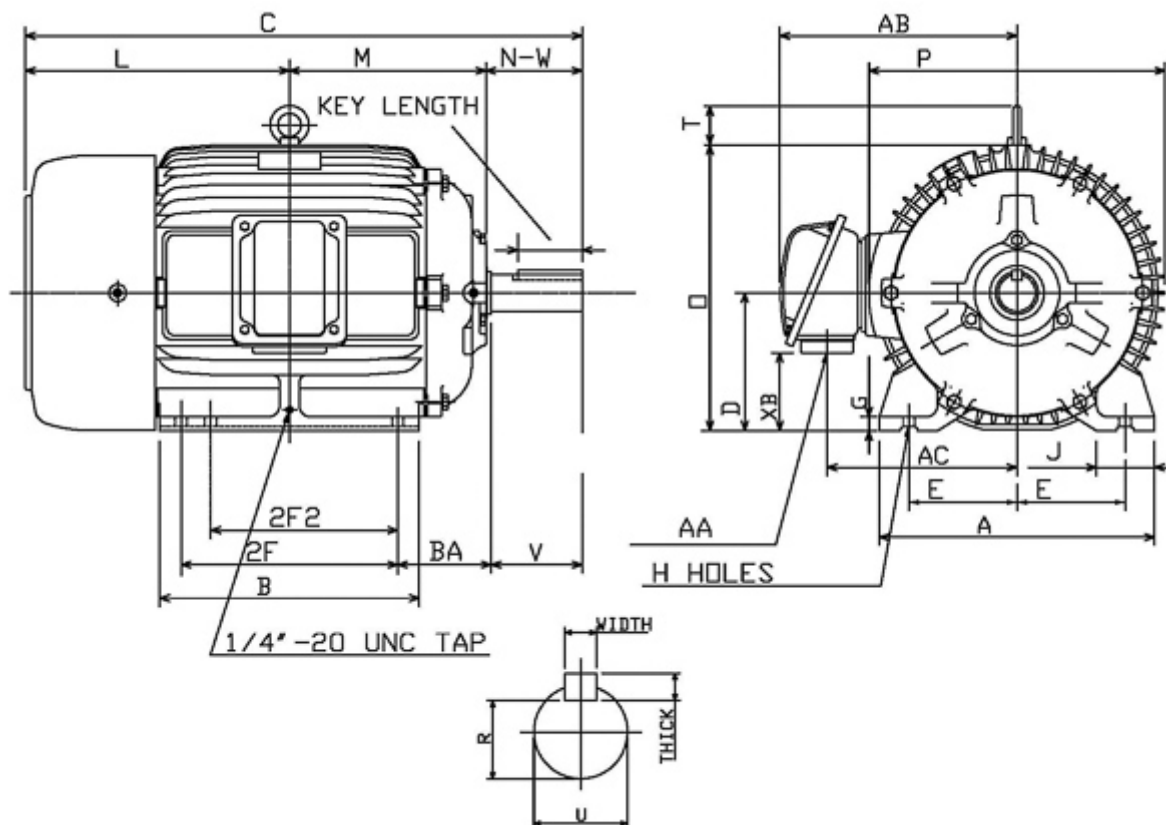
Technical Documentation

**APH03025**  
**Advantage Plus IEEE Ready | AEHH8R**

Date: June 26, 2020

### Dimensional Drawing

| Catalogue | Model  | HP | Pole | kW | Rating     | Voltage | Hz | RPM  |
|-----------|--------|----|------|----|------------|---------|----|------|
| APH03025  | AEHH8R | 30 | 2    | 22 | Continuous | 575     | 60 | 3600 |



| Frame Size       |       | Mounting |          |         |                       |                | A             | B     | C                  | CD         | D       |
|------------------|-------|----------|----------|---------|-----------------------|----------------|---------------|-------|--------------------|------------|---------|
|                  |       | E        | 2F       | 2F2     | H                     | BA             |               |       |                    |            |         |
| 286TS            |       | 5.5      | 11       | 9.5     | 0.53                  | 4.75           | 13.98         | 13.19 | 26.93              |            | 7       |
| G                | J     | K        | L        | M       | O                     | P              | T             | Key   |                    |            | Keyseat |
|                  |       |          |          |         |                       |                |               | Width | Thick              | Length     | R       |
| 0.7              | 2.95  |          | 13.43    | 9.98    | 14.5                  | 15.05          | 2.36          | 0.375 | 0.375              | 1.93       | 1.416   |
| Terminal Housing |       |          |          | Aux Box |                       | C/D Flange     |               |       |                    |            |         |
| AA               | AB    | AC       | XB       | AE      | AX                    | BB             | AH            | AK    | BD                 | AJ         | BF      |
| NPT11/2<br>"     | 13.27 | 10.35    | 3.54     |         |                       |                |               |       |                    |            |         |
| Shaft Extension  |       |          | Bearings |         | Approx.<br>Weight Lbs | SPL<br>dBA/3ft | Ins.<br>Class | S.F.  | Drive Method       | Dimensions |         |
| N-W              | U     | V        | DE       | NDE     |                       |                |               |       |                    |            |         |
| 3.25             | 1.625 | 3.2      | 6311ZC3  | 6310ZC3 | 444                   | 77             | F             | 1.15  | Direct<br>Coupling | Inches     |         |

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|                                                                                   | Date: June 26, 2020 |

## Technical Data Sheet

|                    |                        |
|--------------------|------------------------|
| Motor Type: AEHH8R | Catalogue No: APH03025 |
|--------------------|------------------------|

### Nameplate Information

| HP        | Pole       | RPM            | Frame       | Voltage     | Hz           | Phase          |
|-----------|------------|----------------|-------------|-------------|--------------|----------------|
| 30        | 2          | 3545           | 286TS       | 575         | 60           | 3              |
| Enclosure | Ins. Class | Service Factor | Time Rating | NEMA Design | Rated Amb.   | Rated Altitude |
| TEFC      | F          | 1.15           | Continuous  | B           | -40 to 40 °C | <1000 m        |

### Typical Performance

| Efficiency (%)    |                             |                                 |                                      | Power Factor (%)    |           |                                |
|-------------------|-----------------------------|---------------------------------|--------------------------------------|---------------------|-----------|--------------------------------|
| Full Load         |                             | 3/4 Load                        | 1/2 Load                             | Full Load           | 3/4 Load  | 1/2 Load                       |
| Nom.              | Min.                        |                                 |                                      |                     |           |                                |
| 93.0              | 91.7                        | 93.6                            | 93.0                                 | 91.0                | 90.5      | 87.5                           |
| Torque            |                             |                                 |                                      | Current (A)         |           |                                |
| Full Load (lb-ft) | Locked Rotor (% FLT)        | Pull Up (% FLT)                 | Break Down (% FLT)                   | No Load             | Full Load | Locked Rotor                   |
| 44.43             | 175                         | 140                             | 240                                  | 4.8                 | 26.6      | 174                            |
| NEMA KVA Code     | Inertia (WR <sup>2</sup> )  |                                 |                                      | Safe Stall Time (s) |           | Noise Level Sound Press. dB(A) |
|                   | Rotor (lb-ft <sup>2</sup> ) | NEMA Load (lb-ft <sup>2</sup> ) | Max. Allowable (lb-ft <sup>2</sup> ) | Cold                | Hot       |                                |
| G                 | 2.831                       | 30.00                           | 73.00                                | 24                  | 17        | 77                             |

### VFD Duty Information

| Speed Range     |                 |                | VFD     |              | S.F.     |
|-----------------|-----------------|----------------|---------|--------------|----------|
| Constant Torque | Variable Torque | Constant Power | Carrier | Type         |          |
| 6-60Hz          | 3-60Hz          | 60-90Hz        | ≤ 5 kHz | VPWM or CPWM | 1.0 Only |

### Hazardous Locations Information

| CSA Certified                                                                | Other Certification           |
|------------------------------------------------------------------------------|-------------------------------|
| Class I, Div 2, Groups B, C & D<br>Class I, Zone 2, Groups IIB+H2, IIB & IIA | Class II, Div 2, Groups F & G |
| Temp Code (Sinewave / VFD)                                                   | T3C / T3B                     |

### Additional Certifications

### Additional Information

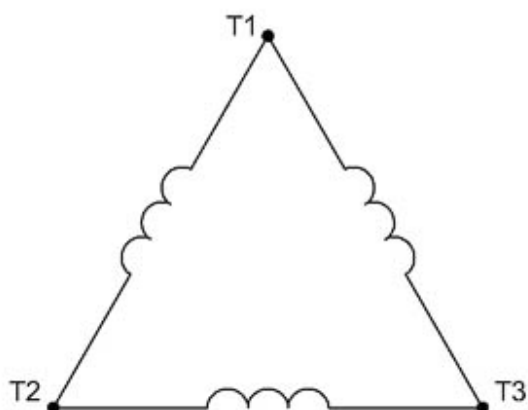
| Bearings |         | Approx. Weight |
|----------|---------|----------------|
| DE       | NDE     | lbs            |
| 6311ZC3  | 6310ZC3 | 444            |

### Nameplate Drawing

## Advantage Plus IEEE Ready

|                 |                   |                |          |                |             |
|-----------------|-------------------|----------------|----------|----------------|-------------|
| TYPE            | AEHH8R            | CAT. NO.       | APH03025 |                |             |
| OUTPUT          | 30 HP    22 kW    | FRAME          | 286TS    | TEFC           |             |
| R.P.M.          | 3545              | POLE           | 2        | INS.           | F           |
| VOLTS           | 575               | PHASE          | 3        | Hz             | 60          |
| AMPS            | 26.6              | CODE           | G        | S.F.           | 1.15        |
| AMBIENT         | 40 °C             | NOM. EFF. 93.0 |          | MIN. EFF. 91.7 |             |
| BEARINGS        | 6311ZC3 / 6310ZC3 |                |          | RATING Cont.   |             |
| SER. NO.        | TBD               |                | DESIGN   | B              | WT. 444 LBS |
| PWM VFD<br>DUTY | VT                | CT             | CP       | S.F.           |             |
|                 | 3-60Hz            | 6-60Hz         | 60-90Hz  | 1.0 Only       |             |

### Connection Diagram

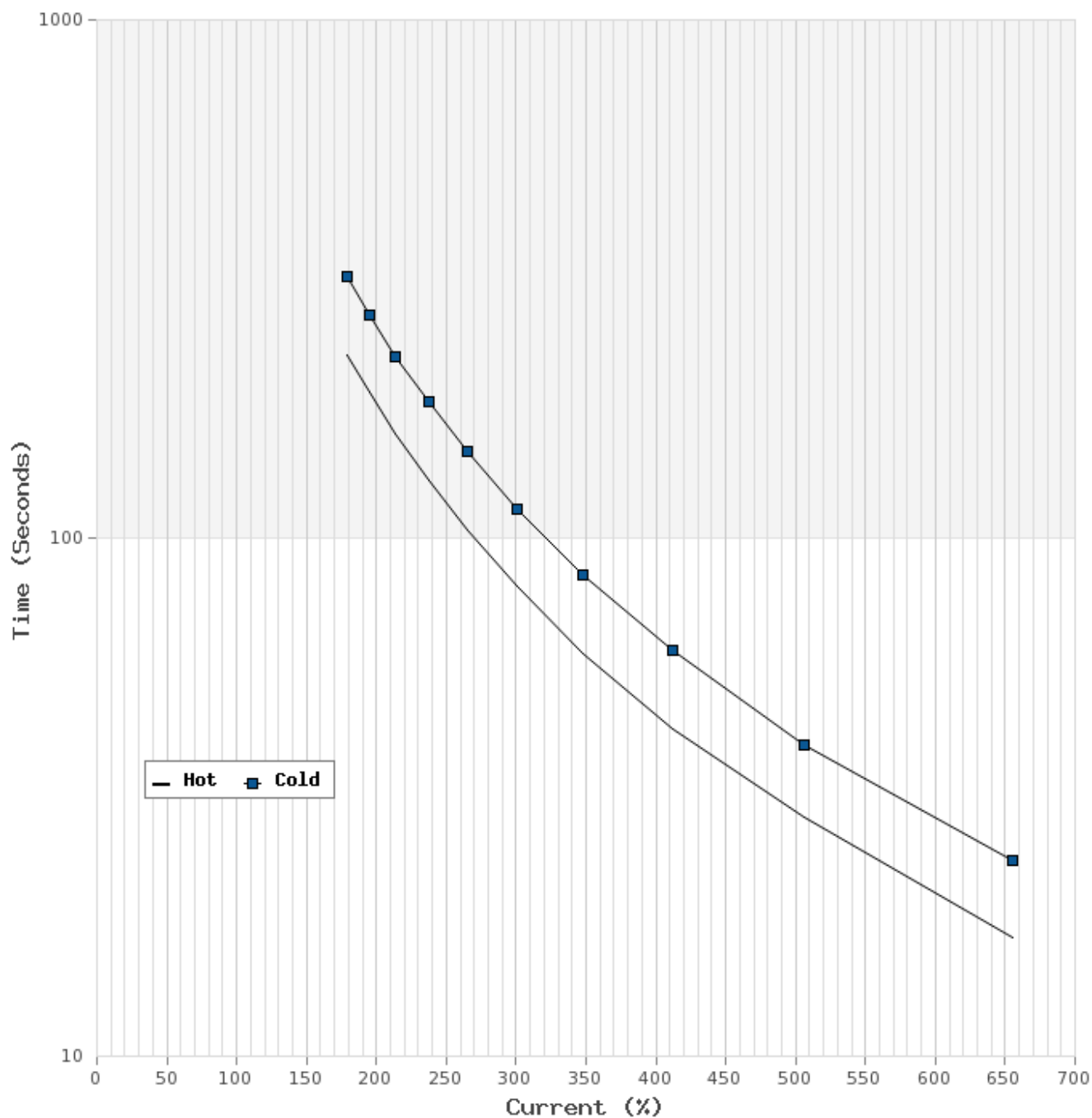


| 3 LEAD  |       | SINGLE VOLTAGE |    |    | DELTA |
|---------|-------|----------------|----|----|-------|
| VOLTAGE | CONN. | L1             | L2 | L3 |       |
| -       | DELTA | 1              | 2  | 3  |       |

WD\_3D

### Thermal Limit Curves

|                    |           |                        |      |                                   |        |
|--------------------|-----------|------------------------|------|-----------------------------------|--------|
| Motor Type: AEHH8R |           | Catalogue No: APH03025 |      | Family: Advantage Plus IEEE Ready |        |
| HP                 | 30        | Safe Stall Time        |      | Full Load A                       | 26.6 A |
| Voltage            | 575V 60Hz | Hot                    | 17 s | % Inrush                          | 655 %  |
| RPM                | 3600      | Cold                   | 24 s | Locked Rotor A                    | 174 A  |



### T-N and I-N Curves

|                    |           |                        |             |                                   |         |
|--------------------|-----------|------------------------|-------------|-----------------------------------|---------|
| Motor Type: AEHH8R |           | Catalogue No: APH03025 |             | Family: Advantage Plus IEEE Ready |         |
| HP                 | 30        | Full Load T            | 44.43 lb-ft | Full Load A                       | 26.6 A  |
| Voltage            | 575V 60Hz | Locked Rotor T         | 175 %       | Locked Rotor A                    | 174.0 A |
| RPM                | 3600      | Pull Up T              | 140 %       | Break Down T                      | 240 %   |

